



# **New Digital Radiological Photography Process Makes Pictures Perfect and in Real Time**

The New Mexico Veterans Affairs Health Care System's Picture Archiving and Communication System Provides Instant Access to a Patient's Radiology Images for Accelerated Review by Medical Professionals

By Michael P. Kleiman, Voluntary Service Specialist, New Mexico Veterans Affairs Health Care System

The days for using film for radiological imaging at the New Mexico Veterans Affairs Health Care System (NMVAHCS) have been numbered. With the recent installation of the picture archiving and communication system by the organization's Imaging Service, the process of taking an x-ray has met the digital age, resulting in enhanced staff productivity and patient satisfaction. This cutting-edge technology provides instant access of digital images around the clock for providers, radiologists, and

other medical professionals involved in a patient's care. With the new imaging system, there is no film to lose, wait on, or transport from one office to the next. The images can be viewed and evaluated in real time by those staff members with a need to know at 280 computer work stations and 13 quadruple monitors located throughout the Albuquerque Veterans Affairs Medical Center (AVAMC). Like the title of a famous Bob Dylan song, the times they are a changin' regarding radiological photography.

In May 2003, the installation of the picture archiving and communication system, or PACS as it commonly referred as, began at the AVAMC, but it was both the Army

and Air Force that helped give the program its start in the late 1980s and early 1990s. PACS originated from computer-based imaging used in space exploration, and after several years of research and testing, the Department of Veterans Affairs decided to implement PACS in all of its medical centers nationwide. In addition, the federal agency developed the software for PACS, known as radiology information and hospital information systems.

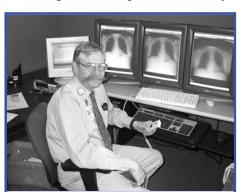
Currently, the NMVAHCS is the only medical organization in the Land of Enchantment with PACS technology. The new digital imaging system has sparked a cultural revolution in the application and expediency of medical care in Albuquerque and throughout the Department of Veterans Affairs.

Imaging Service Chief Dr. Michael F. Hartshorne knows first hand of PACS' benefits to his staff and their patients. He daily reviews hundreds of digital radiological

images, a significant increase from days gone by. "PACS has made me more efficient than I ever was," said Dr. Hartshorne. "With the new system, I am twice as fast reading the daily load of images."

Patients, too, are reaping rewards from PACS. With accelerated assessment of x-rays and instantaneous reporting, the digital radiological imaging system provides physicians with quality medical information that can be provided to the veteran in an expeditious manner. In addition, PACS will save the NMVAHCS approximately \$250,000 annually in film costs. In the next few months, the use of film for radiological imaging will cease at the

Albuquerque medical facility, and PACS will become the standard way of doing business; one established by the NMVAHCS for others to follow.



Dr. Michael F. Hartshorne, Chief, Imaging Service, dictates radiology information about a patient after reviewing several picture archiving and communication system (PACS) images on monitors in the department. PACS provides a patient's radiological image in real time for providers, radiologists, and other medical professionals to assess, ultimately enhancing staff productivity and patient satisfaction.

If you want to learn more, or have questions about this exciting new technology, call Jeff Meyer, Imaging Service, at (505) 265-1711, extension 4756 or 1-800-465-8262, extension 4756.

# Beware of Secret Diet Killers

Pssssssst! Have you heard? Secret Diet Killers are waiting to sabotage your weight loss efforts. Here are just a few of them:

#### MAKING FAVORITE FOODS FORBIDDEN

Weight loss does not mean deprivation. If you love pizza, eat it once a month instead of once a week. Eat two pieces instead of four. Denying yourself pleasure will lead to failure.

#### 2. OVEREATING DIET FOOD

Switching to low-fat or low-calorie foods is smart, but remember to eat sensibly. Consuming an entire bag of reduced fat cookies will not help you achieve your goal.

#### **3.** FORGETTING LITTLE BITES

If you're tracking food intake, don't forget little nibbles and "tastes" of cookie batter, spaghetti sauce, and homemade salad dressing. Every bite contains fat or calories, so every bite counts!

#### 4. AIMING FOR ZERO

Dieters often try to reduce calories as much as possible. While you may need to decrease caloric intake, don't attempt to avoid *all* calories. The human body *requires* a certain amount of fat and sugar. Ask your doctor how many calories you need each day and plan meals accordingly.

#### 5. OBSESSING ABOUT THE SCALES

On a sensible weight loss plan, you may only lose one or two pounds each week. Daily weights fluctuate, so don't climb on the scales each morning to measure your progress. Seeing the dial move up even one pound can be disappointing enough to cause some people to give up.

#### SWEARING OFF SOLIDS

Never, ever go on a so-called liquid diet or consume diet drinks in lieu of solid food. Your body is not able to function properly without a variety of vitamins and minerals, and the best way to get them is through healthy meals.

Be on the lookout for these and other Diet Killers. Your ability to recognize them puts you a step closer to achieving your goals.

## **Most Lower Back Pain** is **Avoidable**

People who suffer from lower back pain have something in common with their physician: frustration! Why is treating such a common malady so difficult?

Most back pain is caused by weak muscles, excess weight, lack of exercise, or poor posture. Muscle spasms

in the back cause pain, and the prolonged pain induces additional spasms. The cycle continues sometimes for weeks - and occasionally extends into the buttocks, upper legs, and hips. But doctors who can't find any actual nerve damage can only suggest rest



or lifestyle changes, and perhaps prescribe pain medication.

Back pain sufferers usually adhere to an initial rest period, but they are often reluctant to do what is necessary to prevent future injuries. Most physicians recommend exercises to strengthen lower back and abdominal muscles, and regular stretching to increase flexibility. Some patients also need to lose weight, while others just need to practice good posture!

What can you do to lessen your chance of a lower back injury?

- Avoid repetitive or sustained bending over.
- Use a carrier for luggage, briefcases, or bags normally carried on the shoulder.
- Avoid awkward or unbalanced postures like sitting with weight shifted to one side, crossing your legs at the knees while sitting, or carrying your wallet in your back pocket.
- · Sit up straight.
- · Lose weight if you need to.
- Find someone to help with heavy awkward objects, or use a jack or dolly to lift and move items.
- Get plenty of rest on a mattress with adequate support.

Estimates indicate that four out of five adults will experience significant lower back pain sometime during their life. Avoid becoming a statistic, and you'll avoid the frustration of a long, slow recovery from this painful ailment.

### MEDICAL TOOLBOX:

#### X-rays Help Doctors Diagnose & Treat Illness

Patients used to be concerned about radiation exposure from x-rays. Today's radiological procedures, however, safely take pictures that play an important role in the diagnosis and treatment of your illness. X-rays look like a photographic negative. A special doctor called a radiologist interprets the picture and sends the results to your physician.

- X-rays are the most common radiological test, and some people use the term generically to describe other radiological procedures. X-rays commonly diagnose broken bones.
- **Bone densitometry**, a quick and painless test, shows whether a patient has a loss of bone mass, which makes older adults prone to fractures.
- After a dye is administered through an IV, an intravenous pyelogram (IVP) reveals kidney stones, an enlarged prostate, or a tumor.

- A **barium enema** is an x-ray of the colon and large intestine. The procedure sounds unpleasant, but it saves lives by revealing cancer, polyps, and diverticulitis (a bulge in the colon).
- An **upper GI** (**gastrointestinal**) reveals the esophagus, stomach, and small intestine after the patient drinks a special fluid. It allows diagnosis of ulcers, cancer, or intestinal blockage.
- Pelvic sonograms use sonar to detect abnormalities in an unborn baby. They can also reveal cysts or tumors in the pelvic area.
- A mammogram is a special breast x-ray that helps detect breast cancer early, often before a patient even feels a lump.
- During a **CT scan**, you lie very still while a machine takes pictures, usually of just one area (brain, chest, abdomen, etc.). Often it helps your doctor diagnose central nervous system disorders.

Other types of radiological procedures also help diagnose and treat diseases. Ask your doctor if you have any questions about why radiological procedures are ordered for you or how they are administered.

## Parkinson's Disease Strikes All Age Groups

Parkinson's Disease (PD) affects approximately one million people in the United States. It is a neurological disorder (sometimes called a movement disorder) that progressively worsens. Certain brain cells quit producing dopamine, a chemical that carries messages about movement and balance. The resulting symptoms can be hard to detect at first because they are so subtle, but over time they increase and are hard to miss. Not all patients have all symptoms but common ones include:

- Tremor in one or both hands, arms, legs, or face.
- Slowness of movement or stiff body parts (arms, legs).
- Difficulty initiating or maintaining movements.
- Balance instability or poor posture.
- Lack of facial expression.

Ongoing research has led to highly effective treatments. Drugs that mimic dopamine bring amazing results, and surgical procedures work wonders at helping some people control symptoms.

Other treatments seem to help, too. Physical therapy builds strength and keeps muscles flexible, while speech exercises make it easier to talk. Counseling helps PD patients work through emotional swings common with the disorder, and many people say support groups help them maintain a positive attitude. Parkinson's can strike at any age, and for those learning to live with PD, several organizations offer help through brochures, videos, and referral services:

Parkinson's Disease Foundation, Inc. 1-800-457-6676

The National Parkinson Foundation 1-800-433-7022

The American Parkinson Disease Association, Inc. 1-800-223-2732

## MyHealthe Vet: A New and Exciting Web-Based Program

By Spencer Ralston, MPA Associate Director, SAVAHCS - Tucson

www.myhealthevet.va.gov

n Veterans Day of 2003, the VA proudly announced the launch of a new online website known as "MyHealthe Vet" where veterans, family, and VA clinicians can come together to optimize health care. This website offers perhaps the most advanced system for patient education and interaction available anywhere in this country.

By entering the worldwide web address www.myhealthevet.va.gov the veteran, his or her family members, and VA staff can register and access important and interesting health news and information. In Phase 1 of MyHealtheVet, a vast health education library maintained by HealthGate offers MHV registrants the ability to search

for information on virtually anything related to health, medical conditions, and

drugs. A link to "Healthy Living Calculators" helps registrants assess their health status. A link to "Rx Checker" lets patients who are taking multiple medications be sure those medications are not adversely interacting with each other. Links to the "Women's Health Guide" and the "Men's Health Guide" offer comprehensive quickreference guides to health conditions and medical

Phase 2 (scheduled to be online this summer) will be a tremendous addition to the MHV program. With this enhancement, VA-enrolled patients will have the ability to order their prescription refills online. They will also be able to view their co-payment balance and next scheduled appointment. Additionally, VA patients will be able to enter certain health information (such as weight), and even keep

a personal calendar. Eventually patients will be able to add such information as their blood pressure and blood glucose levels. All of this self-entered data will help the veteran and (if desired) his or her family and provider monitor progress in maintaining or improving health status.

Finally, in Phase 3 (which is expected to be rolled out during the winter of 2005), veteran patients will have the ability to view parts of their medical record, and share this information with those they designate – for example their spouse, children, community providers, etc. Also being developed is a way to allow two-way communication online between patients and providers.

Here are some interesting statistics: As of February

2004, over 15,000 people MHV account.

have registered for an

website averages 4,300 visits a day – with 70 percent of those coming from America Online (AOL) subscribers. The top five visiting states are California, Virginia, Texas, Georgia and Illinois. And, while close to 99 percent of all visitors were from the United States, there were visitors from such countries as Germany, the Netherlands, Canada, the United Kingdom, South Korea, Nigeria, Japan, Australia, China, and Spain.

For our patients, MyHealtheVet offers a way to become a knowledgeable partner with physicians and nurses in terms of care and treatment. MyHealtheVet is of great benefit to veterans, their families, and VA employees, and is just one more way that the Department of Veterans Affairs is providing high quality care to America's heroes and heroines.

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